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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/748,448 Filing Date: December 30, 2003 Appellant(s): ONDRLA ET AL.

> Ondrla, Jeff et al. For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 25, 2008 appealing from the Office action mailed September 18, 2007.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

This appeal involves claims 27-37.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner:

- a. Claims 27-31 and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leonard et al. (US 6,228,120 B 1; cited in Applicants' IDS) in view of in view of Horber (WO 02/39932 A1) and Glien et al. (DE 101 23 517 C1; cited in Applicants' IDS).
- b. 35 U.S.C. 102(b) rejection of dependent claim 28, as being clearly anticipated by Glien et al. (DE 101 23 517 C1; cited in Applicants' IDS).

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GROUNDS OF REJECTION NOT ON REVIEW

The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief: Claims 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leonard et al. (US 6,228,120 B1; cited in Applicants' IDS) in view of in view of Horber (WO 02/39932 A1) and Bahler (WO 2001/22905; previously cited by the Examiner).

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Horber	WO 02/39932	5-2002
Glien et al.	DE 10123517	11-2002
Leonard et al.	US 6,228,120	5-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

 Claims 27-35 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Horber (WO 02/39932 A1; previously cited by the Examiner). For English translation see US 6,818,019
 B2.

Referring to Figures 1, 3, 9, and 12 Horber discloses a shoulder joint prosthesis comprising:

(i) A stem (stem 15 of shaft piece 13) configured to be implanted within a bone, the stem including a first coupler bore (first interpretation: bore of disk 31; second interpretation: first half of joint cavity 19; third interpretation: bore of disk 31 + first half of joint cavity 19) therein with an interior wall portion which, when viewed in cross-section, extends in a line

within a first bore portion (e.g., opening or entrance) from a proximal surface portion of the stem to a ledge (first interpretation: edge/ledge 37; second interpretation: edge/ledge 23) which defines a portion of the bore narrower than the first bore portion, wherein the ledge is located between the first bore portion and a second bore portion;

- (ii) A joint component (head cap 29) having a bearing surface and defining a second coupler bore (see Figures 1 and 9);
- (iii) A mounting element (collar piece 21) having (i) a proximal portion (e.g., collar extension 27) received within the second coupler bore of the joint component in a friction fit manner, and
- (ii) a spherical articulating portion (articulation spherical head 25, or spherical edge surface 97) located within the first bore portion; and
- (iv) A fastener (screw 105) having a first portion coupled with the spherical articulating portion of the mounting element and a second portion coupled with the stem.

The bearing surface of said joint component mates with a glenoid component (12). The "interior wall portion" could be: (i) a portion of the interior wall of the bore of disk 31; and (ii) a portion of the first half of joint cavity 19. Any of these "interior wall portions" extends inwardly toward a longitudinal axis of the first coupler bore from the proximal surface in a straight line.

Also, the articulating face of articulation head 25 touches the internal bore around substantially an entire perimeter of the internal bore defined by the intersection of a plane (note: the "plane" is not defined in the claim language) with the internal bore.

It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPO 138.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959).

"[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

- II. Claims 27 and 29-37 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Glien et al. (DE 101 23 517 C1; cited in Applicants' IDS).
- Referring to Figures 1-8 (particularly Figures 3-5), Glien et al. disclose a joint prosthesis comprising:
- a. A stem (stem 12) having a bone engagement portion and a surface facing the mating component of the joint, said surface defining a tapered bore (cavity 14 is tapered at 15, 16, 17, and its distal end);
- A head component (head 40) having a bearing surface (see Figures 3-5) and a tapered cavity (tapered cavity 41);
- c. A mounting element (character 20) having a proximal portion (tapered block 21, 28) configured for engagement (emphasis added to functional language) with said head component and an articulating portion (hemispherical ball joint 23) defining a spherical bearing surface sized to be received (emphasis added to functional language) within said tapered bore and to form (emphasis added to functional language) a friction-fit engagement with said bore when said

comprising:

articulating portion is pushed into said bore, the mounting element further having a passageway (cavity 24) through said mounting element with an inner bearing surface (surfaces 25, 26, and tapered surface between the proximal end and distal end of cavity 24) at said articulating portion; and

- d. A screw (screw 30) extending from said mounting element for engagement (emphasis added to functional language) to the stem when said articulating portion is disposed within said tapered bore. Said screw comprises a cylindrical rod 31 having threaded end 33 formed therein. Said screw further includes an underside configured for articulating contact (emphasis added to functional language) with said inner bearing surface (surfaces 25, 26, and tapered surface between the proximal end and distal end of cavity 24) of the mounting element. The spherical bearing surface of said mounting element for contacting said bore to permit movement of said mounting element in multiple degrees of freedom (see Figures).
- III. Claims 32 and 33 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Leonard et al. (US 6,228,120 B1; cited in Applicants' IDS).
 Referring to Figures 1-9 (particularly Figures 1-3), Leonard et al. disclose a joint prosthesis
- a. A stem (stem 1) having a bone engagement portion (rod 2) and a surface (frontal face 4 of metaphysical section 3) facing the mating component of the joint, said surface defining a bore (cavity 7) and a threaded bore (threaded bore 8) aligned with said bore;
- A head component (head 20) having a bearing surface (see Figures 1-3) and a tapered cavity (tapered cavity 21);

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c. A mounting element (tapered swivel 12 + hemispherical ball joint 10) having a proximal portion (tapered swivel 12) configured for engagement (emphasis added to functional language) with said head component (see columns 6 and 7) and an articulating portion (hemispherical ball joint 10) defining a spherical bearing surface sized to be received (emphasis added to functional language) within said bore (see columns 5 and 6) and to form (emphasis added to functional language) a friction-fit engagement (see column 6, lines 25-31) with said bore when said articulating portion is pushed into said bore, the mounting element further having a passageway (cavity 14) through said mounting element with an inner hemispherical bearing surface (hemispherical surface 10b) at said articulating portion; and

d. A screw (locking unit 16) extending from said mounting element for engagement (emphasis added to functional language) to said threaded bore (see columns 6 and 7) when said articulating portion is disposed within said bore. Said screw comprises a cylindrical rod 17 having threaded end 17a formed therein. Said screw further includes hemispherical ball joint 18 (underside of head 19) configured for articulating contact (emphasis added to functional language) with internal/inner hemispherical surface 10b of hemispherical ball joint 10. The spherical bearing surface of said mounting element for contacting said bore to permit movement of said mounting element in multiple degrees of freedom (see column 8, line 61 to column 9, line 24). The method for mounting said joint component to a bone is disclosed at column 8, line 48 to column 9, line 36. The method (particularly, position adjustment) could be performed with or without using a trial implant (see column 9, lines 37-48).

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(10) Response to Argument

 Rejection under 35 U.S.C. 102(b) as being clearly anticipated Horber (WO 02/39932 A1; previously cited by the Examiner). For English translation see US 6,818,019 B2.

Regarding claim 27, the Applicants argue Horber does not teach "an interior wall portion located within the first coupler bore that extends from the proximal surface in a straight line". The Examiner respectfully disagrees. As clearly seen in Figures 1, 3, and 12, Horber clearly shows a "first coupler bore" (first interpretation: bore of disk 31; second interpretation: first half of joint cavity 19; third interpretation: bore of disk 31 + first half of joint cavity 19), and the stem further includes an interior wall portion located within the first coupler bore that extends inwardly toward a longitudinal axis of the first coupler bore from the proximal surface in a straight line (each of Figures 1, 3, and 12 clearly show disk 31 as comprising a slanted/inclined straight line, which extends from a proximal surface), and wherein the spherical articulating portion (articulation spherical head 25, or spherical edge surface 97) of the mounting element (piece 21) touches the interior wall portion at a point along the straight line (emphasis added, and clearly seen in each of Figures 1, 3, and 12).

Regarding claim 28, the Applicants argue Horber does not teach "the mounting element defines a passageway extending therethough; and a proximal part of a fastener is located within the passageway, and a distal part of the fastener contacts the stem". Further, the Applicants argue "Moreover, claim 28 requires a passageway within the mounting element. The Examiner has failed to allege any such element in the device of Horber". The Examiner respectfully disagrees. As part of the 102(b) rejection, the Examiner made reference to Figures 1, 3, 9, and 12. In said rejection, the Examiner is broadly interpreting the "fastener" as screw 105 (shown in Figure 12).

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Figure 12 clearly shows fastener 105 within a passageway inside mounting element 21, which fastener 105 has a first portion coupled (i.e., together as an unit, or paired), directly or indirectly, with the spherical articulating portion of the mounting element and a second portion coupled, directly or indirectly, with the stem. The distal part of fastener 105 is clearly shown in Figure 12 as contacting the stem. Said subject matter is further shown in Figure 8.

Regarding claim 32 (a broader version of claim 27) and claim 33, the Applicants argue "None of the structures discussed above with respect to the fastener of claim 28 are coupled with both the mounting element and the stem, much less include two different portions, one portion coupled with the mounting element and the second portion coupled with the stem." Further, the Applicants argue Horber does not teach "fastener extends within the internal bore of the mounting element." The Examiner respectfully disagrees. As part of the 102(b) rejection, the Examiner made reference to Figures 1, 3, 9, and 12. In said rejection, the Examiner is broadly interpreting the "fastener" as serew 105 (shown in Figure 12). Figure 12 clearly shows fastener 105 within a passageway inside mounting element 21, which fastener 105 has a first portion coupled (i.e., together as an unit, or paired), directly or indirectly, with the spherical articulating portion of the mounting element and a second portion coupled, directly or indirectly, with the stem. The distal part of fastener 105 is clearly shown in Figure 12 as contacting the stem. Said subject matter is further shown in Figure 8.

Regarding claim 34, it should be noted that the "internal bore" recited therein refers to the internal bore of the stem (claim 34 depends from claim 32). The Applicants erroneously allege said "internal bore" refers to the internal bore of the "mounting element" (see claim 33). Figures 1, 3, and 12 clearly show the internal bore of the stem as tapered.

II. Rejection under 35 U.S.C. 102(b) as being clearly anticipated Glien et al. (DE 101 23 517 C1; cited in Applicants' IDS).

Regarding claim 27, the Applicants argue that Glien et al. do not disclose or suggest: (i) the limitation "includes an interior wall portion located within the first coupler bore that extends inwardly toward a longitudinal axis of the first coupler bore from the proximal surface in a straight line" (see claim 27), and (ii) the limitation "a fastener having a first portion coupled with the spherical articulating portion of the mounting element and a second portion coupled with the stem" (see claim 32). The Examiner respectfully disagrees. Below is a representation of Glien et al.'s Figure 3:

proximal surface that defines a coupler opening

first coupler bore

interior wall portion (extends inwardly toward a longitudinal axis of the first coupler bore)

Based on this representation (and as seen in Figures 4 and 5), the "spherical articulating portion of the mounting element touches the interior wall portion at a point along the straight line". The "at a point" could be broadly interpreted as one end of the straight line, which is clearly shown as being touched by the spherical articulating portion in Figures 4, 5, 9, and 10. As an alternative interpretation, the "proximal surface that defines a coupler opening" could be broadly interpreted as the proximal/basal 1/3 of cavity 14, and the "an interior wall portion located within the first coupler bore that extends inwardly toward a longitudinal axis of the first coupler bore from the proximal surface in a straight line" could be broadly interpreted as the wall portion labeled "17"

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in Figure 3. Clearly, Glien et al. meet the "spherical articulating portion of the mounting element touches the interior wall portion at a point along the straight line".

Regarding claim 32 (a broader version of claim 27), the claim language does not define the "first portion" and the "second portion" of the fastener. A "portion" is a broad term. As an example, the "first portion" could be the first half of cylindrical rod 31, and the "second portion" could be the second half of cylindrical rod 31. As clearly shown in the Figures, the "second portion" interacts/couples with the stem. The distal part of the fastener indirectly interacts/couples (i.e., together as a unit) with the stem.

Regarding claim 33, Figures 3-9 clearly shows mounting element 20 as comprising an internal bore/passageway receiving fastener 30.

Regarding claim 34, it should be noted that the "internal bore" recited therein refers to the internal bore of the stem (claim 34 depends from claim 32). The Applicants erroneously allege said "internal bore" refers to the internal bore of the "mounting element" (see claim 33). Figures 3-9 clearly show the internal bore of the stem as tapered.

III. Rejection under 35 U.S.C. 102(b) as being clearly anticipated Leonard et al. (US 6,228,120 B1; cited in Applicants' IDS)

Regarding claim 32, the Applicants argue that Leonard et al. do not disclose or suggest: the functional limitation "the spherical articulating portion configured for press-fit engagement with the internal bore" (see claim 32). The Examiner respectfully disagrees. Said limitation is not positively claiming a press-fit engagement. Further, when screw 16 is completely inserted, it will press against the interior wall of the spherical articulating portion and is capable of

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expanding the spherical articulating portion outwardly against an interior wall portion of the internal bore or first coupler bore. The "tolerance" mentioned in Leonard et al.'s column 6 at lines 60-64 will permit screw 16 to create a friction (press-fit) engagement between the spherical articulating portion and the internal bore. "Press fit" is generally defined as "assembly of two tightly fitting parts, as a hub on a shaft, made by a press or the like".

With regards to statements of intended use and other functional statements (e.g., configured for, etc.), they do not impose any structural limitations on the claims distinguishable over the device of **Leonard et al.**, which is capable of being used as claimed if one so desires to do so. In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959).

"[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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